REMARKS

Claims 1-8, 10, 12-23, 25 and 27-46 are pending in the application. Claims 1, 16, 35 and 37 have been amended.

Applicant appreciates the Examiner's indication of allowable subject matter in claims 10, 12-15, 25 and 27-34.

Claims 35 and 37 were objected to for lacking antecedent basis. It is believed that this rejection is overcome by the amendment to claims 35 and 37.

Claims 1-8, 16-23 and 35-46 stand rejected under 35 U.S.C. § 103(a) as allegedly being patentable over U.S. Patent No. 4,716,573 ("Bergstrom et al."). Applicant respectfully traverses this rejection and requests allowance of the pending claims in view of the following remarks.

Novel methods and apparatus for selecting a hop channel for use in a channel hopping communication system are disclosed in Applicant's invention. As recited in claim 1 for example, a method of selecting a hop channel for use in a channel hopping communication system that communicates over a physical channel and includes a sequence of hop channels comprising a set of forbidden hop channels and a remaining set of allowable hop channels comprises selecting a hop channel from the sequence as a function of a present phase. The selected hop channel is used for communication during the present phase if the selected hop channel belongs to the set of allowable hop channels.

If the selected hop channel belongs to the set of forbidden hop channels (i.e. if the selected hop channel does not belong to the set of allowable hop channels), a time-varying parameter is used to select, at the present phase, a substitute hop channel from the set of allowable hop channels, wherein the time-varying parameter is independent of conditions on the

physical channel. The substitute hop channel is used for communication during the present phase. A forbidden hop channel is mapped onto each of the allowable hop channels with equal probability.

Bergstrom describes a frequency hopping method for reducing the effect of narrowband jammers in communication between two stations (Abstract). A plurality of randomly generated fixed frequencies are made available for frequency hopping (col. 2, lines 6-8). Channel quality is tested in one of the fixed frequencies (a first frequency) and the results are used to determine whether to change the frequency of communication to a second frequency among the fixed frequencies (col. 2, lines 11-24). The second frequency is a mapping frequency (col. 2, lines 24-25). Previously prohibited frequencies in Bergstrom are made permissible (co. 3, lines 21-22).

Bergstrom fails to disclose, among other aspects, a forbidden hop channel being mapped onto each of the allowable hop channels with equal probability (see Specification, p. 19, lines 3-15).

In addition, the sequence of hop channels described in exemplary embodiments (and recited in claim 1 for example) comprises a set of forbidden channels and a remaining set of allowable hop channels. In contrast, Bergstrom describes prohibited frequencies being made permissible.

Bergstrom fails to disclose Applicant's invention as claimed. Therefore, claim 1 is allowable over Bergstrom. Claim 16 is similarly allowable over Bergstrom.

The remaining claims, all of which depend on one of allowable claims 1 and 16 and cite additional features of Applicant's invention, are also allowable over Bergstrom.

All of the rejections having been overcome, it is respectfully submitted that this application is in condition for allowance a notice to that effect is earnestly solicited. Should the Examiner have any questions with respect to expediting the prosecution of this application, she is urged to contact the undersigned at the number listed below.

Respectfully submitted,

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